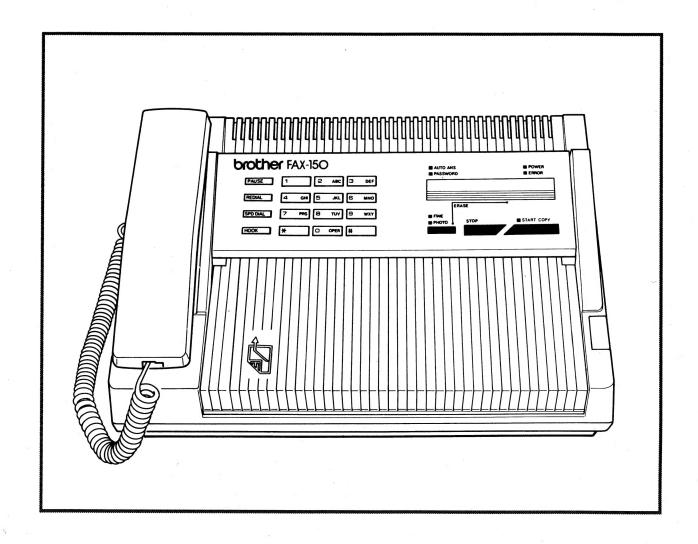
FAX-150

Owner's Manual



This unit generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the Owner's Manual, may cause interference to radio and television reception. It has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications of Subpart J of Part 15 of the FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this unit does cause interference (such as static) to radio or television reception, which can be determined by turning the unit off and on, the user is encouraged to try to correct the interference by employing one or more of the following measures:

- change the location of the receiving antenna (indoor type)
- move the unit away from the radio or TV
- plug the unit into a different outlet so that the unit and the radio or TV are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/TV technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

Brother cannot accept any financial or other responsibilities that may be the result of your use of this information, including direct, indirect, special or consequential damages. There are no warranties extended or granted by this document.

The serial number may be found on the label affixed to the rear of the unit. For your convenience, note this number below and retain this Owner's Manual to serve as a permanent record of your purchase, in the event of a theft or fire or for future reference.

MODEL NO. FAX-150	SERIAL NO.	
NAME OF DEALER		
DATE OF PURCHASE		

This equipment complies with Part 68 of the FCC Rules. On the rear panel of this equipment is a label that contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company.

Ask your telephone company or installer to install the jack suitable for your device if such is not available.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have those devices ring when your telephone number is called. In most, but all areas, the sum of the RENs of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

If your telephone equipment causes harm to the telephone network, the Telephone Company may discontinue your service temporarily. If possible, they will notify you in advance. But if advanced notice isn't practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your Telephone Company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If you experience trouble with this telephone equipment, please contact the manufacturer's authorized service agency for information on obtaining service or repair. The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

WARNING:

For protection against the risk of electrical shock, always disconnect all cables from the wall outlet before servicing, modifying or installing the equipment.

This equipment may not be used on coin service provided by the Telephone Company nor connected to party lines.

NON-HEARING AID-COMPATIBILITY

The telephone with this equipment is not hearing aid-compatible.

FCC rules prohibit the use of non-hearing aid-compatible telephones in the following locations or applications:

1. All public or semi-public coin-operated or credit card telephones.

2. Elevators, highways and tunnels (automobile, subway, rairoad or pedestrian) where a person with impaired hearing might be isolated in an emergency.

3. Places where telephones are specifically installed to alert emergency authorities such as fire, police or medical assistance personnel.

4. Hospital rooms, residential health care facilities, convalescent homes, and prisons.

5. Workstations for hearing-impaired personnel.

 Hotel, motel, apartment lobbies; in stores where telephones are used by patrons to order merchandise; in public transportation terminals where telephones are used to call taxis, or to reserve lodging or rental.

 Hotel and motel rooms. (At least ten percent of the rooms must contain hearing aid-compatible telephones; or contain jacks for plug-in hearing aid-compatible telephones which will be provided to hearing-impaired customers upon request.)

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Definitions and explanations of certain terms which you will encounter in the Owner's Manual

CCITT GROUP 3 A standard for facsimile transmission established by the CCITT –

the International Telegraph and Telephone Consultative Committee. Machines meeting this standard can tarnsmit a

standard page at speeds under 60 seconds.

CONVENIENCE COPIER A copier used to make occasional copies.

DIGITAL FACSIMILE Facsimile that transmits images in the form of discrete data bits.

FINE RESOLUTION 203 x 196 lines per inch – a transmission mode used by facsimile

to transmit images containing a great deal of fine detail.

GREY SCALE Shades of grey (16 in the case of your unit) that is used to provide

a faithful reproduction of photographic images.

KEY SYSTEM A standard office-type telephone system where the telephone

sets have keys for selecting linesand functions.

OFF-HOOK A condition where your handset is off the hook (not in the

cradle).

ON-HOOK A condition where your unit is on the hook (in the cradle).

PBX Private Branch Exchange – a computerized telephone switch

usually found in large organization which accepts calls from the outside and transfers them to various extensions inside and

which routes calls from the inside to the outside.

PSTN Public Switched Telephone Network – the public lines of the

telephone company.

PULSE / TONE

Types of dialing; Pulse is the rotary method, where the phone

system counts pulses (clicks) to determine the number you are dialing. Tone is the audio method where the system listens to

the tones to determine the number you are dialing.

STANDARD RESOLUTION 203x98 lines per inch – the transmission mode used by facsimile

to transmit images containing typewritten or printed matter and

less-involved drawings.

USOC RJ11C JACK The standard modular single-line phone jack.

INTRODUCTION

Thank you for purchasing the **Brother FAX-150**. This **Owner's Manual** will help you derive the fullest benefits from this powerful, compact and feature-rich facsimile transceiver.

The **Brother FAX-150** is a modern, compact desktop digital facsimile unit. Its performance is compatible with CCITT Group 3. Therefore, your new **FAX-150** is compatible with most modern facsimile units.

The **FAX-150** is the ideal low-volume stand-alone unit or a satellite unit in a larger facsimile network. Furthermore, the unit can be used as a convenience copier and as a sophisticated business telephone .

All of the **Brother FAX-150** features can be easily learned by following step-by-step procedures listed on the following pages. As you become familiar with the features and operation of the unit, keep the **Owner's Manual** handy for quick reference and reminders.

The **Owner's Manual** provides a step-by-step description of the procedures you should employ in unpacking, installing and learning the operation of your **Brother FAX-150** unit. If you follow these instructions, you will have no problem with either the installation or the operation of the unit.

To facilitate your understanding of the material, the **Owner's Manual** deals with each major concept and function pertinent to the installation and operation of the **FAX-150** unit in a separate section. First, you will read the *pre-installation instructions*. Then, you will be shown how to *install* the unit. Next, we will show you how to use the unit as a *convenience copier*. Although copying is not a major function, it is an easy one to learn and allows you to make sure that the unit is operating properly. Then, we will explain how to use the basic facsimile functions – *transmission and reception* of documents. This will be followed up by a detailed description of *facsimile-related programming operations*. It is this programmability that makes the **FAX-150** such a powerful, feature-rich unit for its class. Next, we will explain the operation of the *telephone* features of the **FAX-150**, along with the phone-related programming operations. The **Owner's Manual** will be concluded by *troubleshooting hints* and a *speed-dialing directory*, as well as the unit's *specifications*.

Now, open the ${\bf Owner's}\ {\bf Manual}$ to PRE-INSTALLATION INSTRUCTIONS (next page) and read the material carefully.

PRE-INSTALLATION INSTRUCTIONS

BEFORE REMOVING THE UNIT FROM THE PACKING CARTON

The **Brother FAX-150** is designed to operate in an office environment or at home. It is rugged, reliable and virtually maintenance-free. However, to ensure years of trouble-free performance, please observe the following precautions:

- Do not locate the unit near heaters, air conditioners, in direct sunlight or in extremely dusty environments.
- Install the unit on a flat level surface, such as a desk, a table, a typewriter or computer stand.
- · Do not locate the unit where water or chemicals are likely to splash on it.
- Select a vibration-free area of your office.
- · Locate the unit within 3 feet from a telephone wall jack.
- · Locate the unit within 3 feet of a standard, grounded outlet.
- Avoid plugging in the unit into an outlet which is on the same line as an air conditioner, a
 refrigeration unit, a copier, an electric typewriter or any other device that draws a lot of
 current in a relatively short period of time.

CONTENTS OF THE PACKING CARTON

The packing carton contains:

- 1. The Brother FAX-150 unit
- 2. One roll of Brother thermal recording paper
- 3. Telephone handset
- 4. Handset curled cord
- 5. Telephone line cord
- 6. Owner's Manual
- 7. Warranty card
- 8. Test Sheet
- 9. AC power cord (permanently attached to the unit)

PROCEDURES FOR REMOVING THE UNIT FROM THE PACKING CARTON

- 1. Carefully open the carton (see the appropriate inscription on the carton)
- 2. Pull out the FAX-150 and the other devices together with the packing trays
- 3. Remove all packing trays and plastic from the unit
- 4. Take out the telephone line cord from the plastic packaging
- 5. Take out the telephone handset and the curled cord
- 6. Locate and take out the paper roll

INSTALLING THE UNIT

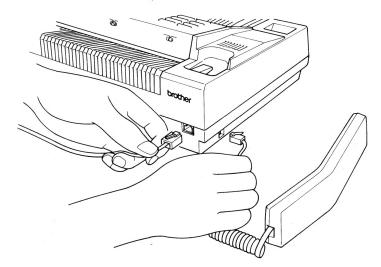
I. SINGLE-LINE TELEPHONE CONNECTIONS

The simplest way to connect the **Brother FAX-150** unit to the public switched telephone network (phone company lines) is to use a single telephone line. The connection is particularly simple if you have a modular wall jack. The most common modular jack is referred to as the **USOC RJ11C jack**. If you have such a jack, follow the instructions below. If your wall jack is not modular, it is very easy to convert the wall plug to a modular form. Conversion kits are available from your local phone company, an electronics / computer store (e.g., Radio Shack) or the AT&T Phone Center stores.

To connect your FAX-150 to the telephone line, follow these steps:

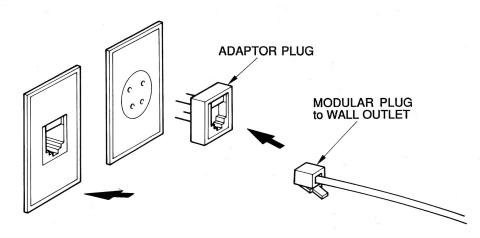
- Connect one end of the curled handset cord to the handset and the second end to the
 jack on the side of the facsimile unit.
- Take the telephone cord which is also included in the carton and connect one of its plugs to the jack in the back of the FAX-150 unit and the second plug to your modular wall jack (USOC RJ11C). Now, the FAX-150 is connected to the telephone network.

Please see the illustration below for the telephone connections.



NOTE: If you have a MODULAR PHONE JACK (USOC RJ11C), simply plug the supplied phone cord into the wall jack.

If you have the older 4-PRONG JACK, you must use a modular 4-prong adapter **USOC RJA1X**. Plug the adapter into the wall jack and then plug the phone cord into the adapter. This is illustrated below.



II. MULTI-LINE TELEPHONE CONNECTIONS

Most offices have key systems or PBXs. While in many cases it is relatively easy to connect the FAX-150 to a key system or a PBX, we suggest that you contact the organization which installed your company's telephone system and ask them to connect the FAX-150 to the system. If the FAX-150 is connected to a multi-line system, ask your installer to connect the FAX-150 to the last line on the system. This way, the FAX-150 will not be activated by every phone call coming into your office. The preferred solution is to ask the phone company to assign a separate line to the facsimile unit. In this case, you can leave the unit in Automatic Answer Mode 24 hours a day and derive full benefits from its automatic, unattended operations capabilities.

III. ELECTRICAL CONNECTION

The **FAX-150** can be plugged into any standard power (110 VAC) outlet. Simply make sure that the outlet is grounded and that it is not on the same line as appliances or office machines which tend to draw a lot of power in a very short period of time, such as refrigerators, copiers, etc. The **FAX-150** power requirements are listed in the SPECIFICATIONS.

IV. INSERTING THE RECORDING PAPER ROLL INTO THE UNIT

Before reading the instructions for inserting the recording paper into the unit, please consider these important notes:

NOTE 1: The recording paper is heat-sensitive. Avoid exposure to high temperature, high humidity or direct sunlight. Keep the received documents (or copied documents) away from high temperature, direct sunlight, high humidity, alcohol, blueprints. Otherwise the documents may become discolored.

NOTE 2: The use of <u>Brother Recording Paper</u> is specifically recommended for this unit. The use of paper not authorized by Brother may adversely affect the unit's performance and may void Brother's product warranty.

Brother Recording paper has a red stripe indicator. Its appearance on your received or copied documents is a warning that the paper roll will be running out shortly. Replace the paper roll when you see the red stripe. Furthermore, Brother Recording paper has a black stripe at the end of the roll. If you had not changed the paper at the appearance of the red stripe, the unit will auto-matically stop when the black stripe appears. This feature works only with Brother Recording paper on Brother facsimile units. Please note that Brother recording paper rolls are overwound (i.e., contain extra paper) so that you are not wasting paper when you remove the roll when the indicator appears.

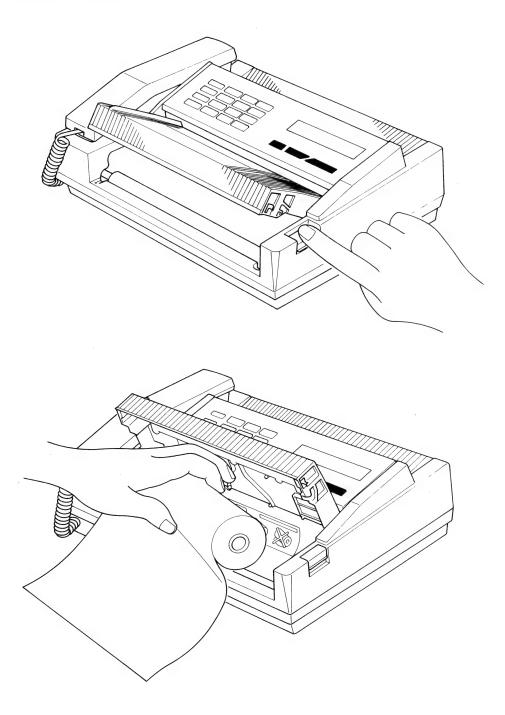
To insert the paper roll, follow these directions:

- 1. Make sure that the POWER switch is OFF. The switch is located on the back of the unit.
- 2. Press the recording paper cover button which is located at the right edge of the top of the machine. This opens the cover.
- 3. Hold the recording paper roll so that the free end of the paper points towards you from the top of the roll.

Be sure not to set the recording paper upside-down. If this happens, you will not get any images on reception or copying.

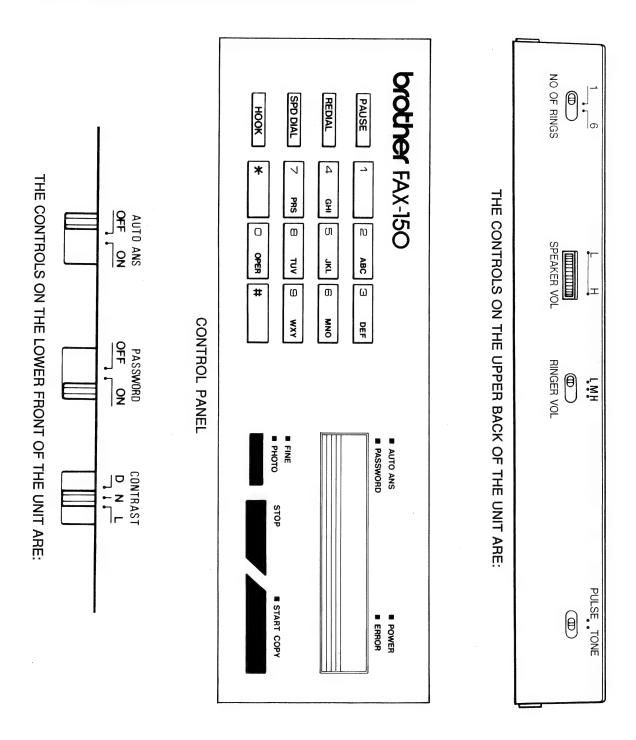
- 4. Simply drop in the paper into the unit. There is no need to thread paper! Make sure that approximately 4 inches (10 cm) of paper protrudes from the unit.
- 5. Push the cover shut until you hear a click.
- 6. Cut off excess paper pulled out from the unit by tearing it off in one smooth movement against the cutting edge of the paper cover.
- 7. Turn the power ON.

This process is illustrated below.



GETTING FAMILIAR WITH THE UNIT

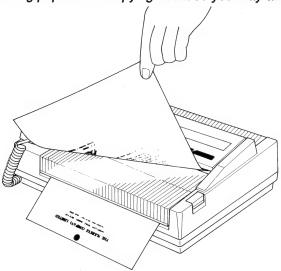
Now that the unit is connected to the telephone network and the power, take a few minutes to become familiar with the unit and various switches and buttons.



HOW TO USE THE UNIT AS A CONVENIENCE COPIER

- 1. Insert the original document *face down* into the unit's scanner, aligning the document's left edge with the document guide.
- 2. Set the *contrast switch* (bottom front of the unit) to match the image density of the original (**D** for dark original, **N** for normal original and **L** for light original).
- 3. The FAX-150 offers three levels of RESOLUTION STANDARD (used for typewritten and typeset text and line drawings), FINE (used for newprint and detailed drawings andPHOTO (for photographs). The PHOTO mode offers sixteen (16) levels of grey scale for excellent reproduction of photographs. Please note that the use of the PHOTO mode, while yielding superior quality copies of photographs, is quite a bit slow. Use this mode only when warranted.
- 4. Press the START/COPY button on the front panel. The START/COPY lamp will light. The unit will automatically select the FINE mode (the FINE lamp will light), unless you've pressed the FINE/PHOTO button to achieve the sixteen (16) levels of grey scale reproduction (in this case, the PHOTO and FINE lamps will light). The unit will automaticallty start drawing the original through the scanner and the copy will start emerging from the slot in the front of the unit. After the copying is completed, the unit will emit a beep and you can tear off the copy. The original will have by now emerged on the other side of the scanner.

Do not cut the recording paper while copying because you may affect the copied image.



IMPORTANT COPYING INFORMATION:

- Copy one document at a time! If you wish to copy more than one page, wait until you hear the short beep after the previous document has been copied. Insert the new document and press the **START/COPY** button again.
- Do not copy very thick pages (over 0.15mm thick).
- · Do not copy wrinkled, wet, curled or torn documents.
- Do not copy documents printed on thick photographic paper, metal or textile.
- Do not copy documents that are too thin (tissue paper, tracing paper, etc.)
- · Remove all staples and paper clips from the documents to be copied.
- Do not copy documents held together by scotch tape.
- Do not copy carbon paper.
- Do not copy documents whose surface is slippery.
- Use copies duplicated by this machine as temporary copies only. If it is necessary to store a copy for a long time, use a copier to reproduce the original document or the copy made by this machine).

NOTE: The FAX-150 can function as a telephone while copying is in progress.

BASIC FACSIMILE FUNCTIONS – TRANSMISSION AND RECEPTION

I. TRANSMISSION OF DOCUMENTS

- 1. Insert the original document *face down* into the unit's scanner, aligning the document's left edge with the document guide. The unit will pull the original partly into the scanner. *Insert one original sheet at a time!* (see 4-f below).
- 2. Set the *contrast switch* (bottom front of the unit) to match the image density of the original (**D** for dark, **N** for normal, **L** for light original, respectively).
- 3. Specify the **FINE** or **PHOTO** mode by pressing the **FINE/PHOTO** button. Unless you specify either of these modes, the unit will automatically select the **NORMAL** mode Please note that **NORMAL** offers the fastest transmission speed, followed by **FINE** and then the **PHOTO** (the slowest).
- 4. Pick up the handset. After you hear the dial tone, dial the other party's number.
 - (a) If a voice answers, ask the other party to activate manual fax reception (if the other unit is a Brother unit, the other party will push the START/COPY button; if it is not a Brother unit, the other party may have to follow a different procedure).
 - (b) If the other unit is set to automatic facsimile reception, you will hear the fax ready tone. Press the **START/COPY** button. The **START/COPY** lamp will light up. As the transmission starts, the lamp will stay on until completion.
 - (c) When the transmission is underway, replace the handset in its cradle.
 - (d) The original document will be pulled through the scanner.
 - (e) When a page is transmitted, the unit will emit a short beep.
 - (f) To transmit more than one page, wait for the short beep referred to in (e) and feed in the next page. If no new document is fed into a scanner following the short beep, a long beep will sound signifying the termination of the transmission mode. The unit will release the phone line.

You can use the **REDIAL** button for automatically redialing the last number dialed (if, for instance, it was busy when you first tried transmitting the document). To use this feature, simply press the **REDIAL** button.

You may dial a number with the handset in its cradle. This can be done by pressing the **HOOK** button and then dialing the number.

IMPORTANT TRANSMISSION INFORMATION:

- Transmit papers one at a time.
- Do not transmit very thick pages (over 0.15mm thick). If you have to transmit such pages, use a photocopier (not the FAX-150) to make a copy and transmit the copy instead.
- Do not transmit wrinkled, wet, curled or torn documents. Make a photocopy and transmit it instead.

Do not transmit documents printed on thick photographic paper, metal or textile. Make a photocopy and transmit it instead.

Do not transmit documents that are too thin (tissue paper, tracing paper, etc.) The thinnest paper suitable for transmission is 0.055mm. Make a photocopy and transmit it instead.

Remove all staples and paper clips from the documents to be transmitted.

Do not transmit documents held together by scotch tape. Photocopy them and transmit the photocopy.

Do not transmit carbon papers. Make a photocopy and transmit it instead.

Do not transmit documents with slippery surfaces. Make a photocopy and transmit it.

II. RECEPTION OF DOCUMENTS

The **FAX-150** can receive manually or automatically. The choice is made by using the switch marked **AUTO ANS** (lower front end of the unit). The OFF position switches the unit to *manual* reception and the ON position allows *automatic* reception.

A. Manual Reception

When the AUTO ANS switch is in the OFF position, the following should be done when the phone rings:

- 1. Lift the handset.
- 2. If you hear a series of fax beeps, you'll know that a fax message is coming in.
- 3. Press the **START/COPY** button. The **START/COPY** lamp will light up. As the reception gets underway, the lamp will stay on. You may replace the handset in its cradle. The paper will start coming out of the slot.
- 4. When the reception is completed, the unit will emit a long beep.
- 5. Cut the recording paper with the received image. Make sure to do so only after the long beep so as not to affect the quality of the received image.

B. Automatic Reception

When the AUTO ANS switch is in the ON position, the following will occur:

- 1. The unit will receive the fax message automatically after one (1) ring. If you wish the unit to receive the fax message after six (6) rings, use the switch on the back of the control panel (NO OF RINGS switch) to affect this change.
- 2. The START/COPY lamp will light up. As the reception gets underway, the lamp will stay on. The paper will start coming out of the slot.
- 3. When the reception is completed, the unit will emit a long beep.
- 4. Cut the recording paper with the received image. Make sure to do so only after the long beep so as not to affect the quality of the received image.

NOTE: Remove a jammed document from the machine by opening the recording paper cover. Otherwise the receive operation will fail.

III. PASSWORD COMMUNICATION

The **FAX-150** has a *password code* feature. If your unit's password switch (lower front) is set, and so is the sender's or receiver's switch, and the two passwords *do not match*, it is impossible to receive or send a facsimile message. The password code feature is useful in insuring the confidentiality of facsimile communication and in preventing an influx of fax "junk mail." However, if set, it will inhibit the reception/transmission from/to most non-Brother units and from/to most non-Brother units with a different password code. Therefore, unless strictly necessary, we recommend that the password switch be left in the OFF position.

The programming of your password will be explained later.

NOTE: When you send a document *in password mode*, the alarm may sound in the following cases:

- (1) The receiver's facsimile unit does not have a password function
- (2) The two paswords do not match
- (3) You called a wrong number (a variant of the first case)
- (4) The password switch of the receiving facsimile is set in the OFF position

FACSIMILE-RELATED PROGRAMMING OPERATIONS

Unlike most other facsimile units in this class and price range, the **FAX-150** allows the user to program certain facsimile functions and parameters. These are:

- I. The FAX Password Code (for password communication discussed above).
- II. Remote Terminal Identification (RTI) / Transmit Terminal Identification (TTI) telephone number. This is the number that appears on the top of the page when the other party receives your message.
- III. The Station ID (name or identifying numbers). This appears on the top of the page when the other party receives your facsimile communication.
- IV. User-selectable parameter settings (User-selectable Switches)

Telephone-related programming is discussed in the subsequent section.

The programming is done using one or more of the following buttons:

•	HOOK	_	Initiates parameter-setting operation
•	FINE/PHOTO	_	Selects numbers from 1 to 9
•	START/COPY	_	Enters (registers) numbers selected by the FINE button
		-	Lists parameter set status after setting
		_	Selects the number 0

STOP – Completes or interrupts the programming/selection process

The general programming procedure

The general procedure for setting any parameters (programming the functions) is:

- 1. Turn the power OFF (the switch is in the back of the unit)
- 2. Press the **HOOK** button and keep it depressed until **FINE** lamp starts to blink as you turn the power back ON.
- 3. Press the **FINE/PHOTO** button —

●,	1 time	_	To select the FAX PASSWORD SET mode
•	2 times	_	To select the RTI/TTI SET mode
•	3 times	_	To select the STATION ID SET mode

Then, the START/COPY lamp blinks.

NOTE: The unit will go back into the stand-by (idle) status if any of the above buttons are not pushed within 60 seconds.

I. SETTING THE FAX PASSWORD

The factory setting for this FOUR-DIGIT CODE is 0000. Here is an example of how you can change this setting to 1204.

As shown on page 12, the process of registering the FAX PASSWORD starts by pressing the FINE/PHOTO button once in step 3. The following steps are:

4.	Press the \$	START/COPY	button	to print	out the	password	that is	currently	registered
	in the unit.	The following	will be p	orinted o	out:				J

*****	*******CURRENT FAX PASSWORD*******	*******
*		*
*	FAX PASSWORD: 0000	*
*		*
*****	*************BROTHER FAX-150********	******

- 5. To register the new password press **FINE/PHOTO** button once to select the first digit "1".
- 6. Press START/COPY button to register this digit.
- 7. Press FINE/PHOTO button twice to select "2".
- 8. Press START/STOP button to register the "2".
- To register the third digit "0" press START/COPY button. This both selects and registers a "0".
- 10. Press FINE/PHOTO button four times to select the final digit "4".
- 11. Press **START/COPY** button to register this final digit and the **FAX-150** will automatically print out:

**** DO YOU W	ISH TO MAKE THE FOLLOWING CHANGE? *	*****
*		*
*	NEW FAX PASSWORD: 1204	*
*		*
******	*********BROTHER FAX-150************************************	*****

The START/COPY lamp starts to blink when the printout is completed.

12. If your entries are *incorrect*, press the **STOP** button and then the **START/COPY** button. The **FINE** lamp starts to blink. This will bring you back to step 3 where you can select this procedure all over again by going through the subsequent steps.

If your entries are *correct*, press the **START/COPY** button to complete the selection of numbers. Now you have *two* choices. Choice (1) allows you to continue with registration of other parameters. To do so, you press **START/COPY** button again which will bring you back to step 3 above and where you can use the **FINE/PHOTO** button to select the desired parameter. Choice (2) is to terminate the registration process by pressing the **STOP** button.

II. SETTING THE RTI/TTI

A brand-new unit does not come with a pre-registered Remote Terminal Identification (RTI) / Transmit Terminal Identification (TTI) number. You can register your own number of up to twenty (20) digits. Here is an example of how you can register "201 981 0300".

As shown on page 12, the process of registering the RTI/TTI starts by pressing **FINE/PHOTO** button twice in step 3. The following steps are:

4.	Press the START/COPY button to print out the RTI/TTI number currently registered in	1
	the unit. The unit will print out the following:	

*********	CURRENT RTI/TTI NUMBER ***	******
*		*
*	RTI/TTI NUMBER:	*
*		*
*******	***BROTHER FAX-150********	******

- 5. Press FINE/PHOTO button twice to select the first digit "2".
- 6. Press START/COPY button to register this selection.
- 7. To register the second digit "0" press **START/COPY** button. This both selects and registers a "0".
- 8. Press FINE/PHOTO button once to select the third digit "1".
- 9. Press START/COPY button to register this digit.
- 10. Press **FINE/PHOTO** button ten (10) times to select a space.
- 11. Press **START/COPY** button to register this space.
- 12. Continue this operation until you have selected and registered the final digit.
- 13. Press the **STOP** button to initiate the automatic printing of:

****	DO YOU WISH TO MAKE THE FOLLOWING CHANGE? *******
*	*
*	NEW RTI/TTI NUMBER: 201 981 0300 *
*	*
****	******************BROTHER FAX-150************************************

The START/COPY lamp will start to blink when the printout is finished.

14. If your entries are *incorrect*, press the **STOP** button and then the **START/COPY** button. The **FINE** lamp will blink. This will bring you back to step 3 where you can select this procedure all over again by pressing the **FINE/PHOTO** button twice and going through the subsequent steps.

If your entries are *correct*, press the **START/COPY** button to complete the selection of numbers. Now you have *two* choices. Choice (1) allows you to continue with registration of other parameters. To do so, you press **START/COPY** button again which will bring you back to step 3 above and where you can use the **FINE/PHOTO** button to select the desired parameter. Choice (2) is to terminate the registration process by pressing the **STOP** button.

III. SETTING THE STATION ID

A brand-new unit does not come with a pre-registered Station ID. You can register up to fifty (50) alpha-numeric characters for this ID. You can register a mixture of letters and numbers, e.g., XYZ Co. District 13, or you can register all letters or all numbers. Here is an example of how you can register an all-character ID – "BROTHER U.S.A.".

As shown on page 12, the process of registering the STATION ID starts by pressing the **FINE/PHOTO** button three (3) times in step 3. The following steps are:

4.	unit. The unit will print out the following:						

	* STATION ID: *						

5.	To register the letter B, look at the table on the next page and locate "B". Underneath it you will see the number 34. Thus, press FINE/PHOTO button three (3) times, then press START/COPY button to register "3". Then, press FINE/PHOTO button four (4) times and then START/COPY button to register the "4." This registers the letter "B."						
6.	To register the letter R, look at the table and locate "R". Underneath it you will see the number 50. Press FINE/PHOTO button five (5) times, press START/COPY button to register "5". Then, press START/COPY to register and select the "0." This registers "R".						
7.	To register the letter O, look at the table and locate "O". Underneath it you will see the number 47. Press FINE/PHOTO button four (4) times, then press START/COPY button to register "4". Then, press FINE/PHOTO button seven (7) times and then START/COPY button to register the "7." This registers the letter "O." Continue this procedure until you've registered the word "BROTHER."						
8.	To register a space, look at the table and locate "BLANK". Underneath it you will see the number 00. Press START/COPY button twice to register "00". This registers a blank space.						
9.	Continue this operation until you have selected and registered the entire STATION ID.						
10.	Press the STOP button to initiate the automatic printing of:						
	**** DO YOU WISH TO MAKE THE FOLLOWING CHANGE? *******						
	* NEW STATIONS ID: BROTHER U.S.A. *						

	The START/COPY lamp starts to blink when the printout is completed.						

11. If your entries are *incorrect*, press the **STOP** button and then the **START/COPY** button. This will bring you back to step 3 where you can select this procedure all over again by pressing the **FINE/PHOTO** button three (3) times and going through the subsequent steps.

If your entries are *correct*, press the **START/COPY** button to complete the selection of numbers. Now you have *two* choices. Choice (1) allows you to continue with registration of other parameters. To do so, you press **START/COPY** button again which will bring you back to step 3 above and where you can use the **FINE/PHOTO** button to select the desired parameter. Choice (2) is to terminate the registration process by pressing the **STOP** button.

THE CHARACTER CODE CHART

BLANK	!	••	#	\$	%	&	•
00	01	02 ,	03	04	05	06	07
()	*	+	9	_	•	1
08	09	10	11	12	13	14	15
0	1	2	3	4	5	6	7
16	17	18	19	20	21	22	23
8	9	:	;	٧	=	^	?
24	25	26	27	28	29	30	31
@	A	В	С	D	E	F	G
32	33	34	35	36	37	38	39
н	f	J	к	L	М	N	0
40	41	42	43	44	45	46	47
Р	Q	R	s	Т	U	v	w
48	49	50	51	52	53	54	55
x	Y	Z	[\]	٨	_
56	57	58	59	60	61	62	63

Example: BROTHER = 34, 50, 47, 52, 40, 37, 50 Example: 201 = 18, 16, 17

IV. USER-SELECTABLE SWITCH

The **FAX-150** offers a number of user-selectable functions via the User Selectable Switches which are initially programmed as **0000000** by the factory. Each of these digits is a "switch" that controls a specific parameter of the facsimile machine.

Digits Parameters they control

Digit 1: The transmission speed

Digit 2: The presence or absence of audible tone

Digits 3 and 4: The resolution mode – NORMAL, FINE, PHOTO.

Digit 5: Length of a document that can be transmitted or copied

Digit 6: The presence or absence of end-of-page mark

Digit 7: NOT USED

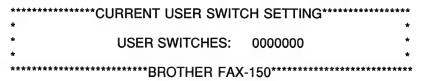
The following table summarizes the digits, the items they control, the factory settings, the optional settings and the new codes for the optional settings. Remember, the factory settings are all **0**s!

Digit No.	Item controlled	Factory Set & Code	Optional Setting & Code
1 2 3 & 4	G3 transmission speed Audible tone Resolution mode	4800 bps (0) Present (0) NORMAL (00)	2400 bps (1) Absent (1) FINE (10) PHOTO (grey scale) (11)
5 6 7	NOT USED End-of-page mark NOT USED	Present (0)	Absent (1)

For example, when the factory selected for digits 3 and 4 the setting of **00**, the **FAX-150** will automatically select the NORMAL mode as the "home position". However, if most of your transmissions are of photographs, you may wish to change the "home position" to PHOTO (by setting the digits 3 and 4 to **11**. See below for the procedure.

To set a user-selectable function:

- 1. Turn the power OFF.
- 2. Turn the power ON again while depressing the **FINE/PHOTO** button.
- 3. The unit will automatically print out:



The **FINE** lamp will blink.

4. Select the digit you wish to change and press the FINE/PHOTO button the appropriate number of times. For example, to select digit 2, press FINE/PHOTO button twice.

- 5. Press START/COPY button to enter the selection.
- 6. Now, you can change the factory setting of "0" to the optional setting of "1". To enter "1", press **FINE** button once. Press **START/COPY** button to register this choice. (Note that pressing the **START/STOP** button without pressing **FINE/PHOTO** button beforehand, selects and registers a "0"). The unit will automatically print out:

	DO YOU WISH TO MAKE THE FOLLOWING CHANGE? ***	****
*	NEW USER SWITCHES: 0000100	*
*	**************BROTHER FAX-150********************	****

The START/COPY lamp will start to blink.

7. If your entries are *incorrect*, press the **STOP** button and then the **START/COPY** button. The **FINE** lamp will start to blink. This will bring you back to step 4 where you can select this procedure all over by pressing the **FINE/PHOTO** button five (5) times and then going throrough the rest of the procedure.

If your entries are *correct*, press the **START/COPY** button to complete the selection of numbers. Now you have *two* choices. Choice (1) allows you to continue with registration of other switches. To do so, you press **START/COPY** button again which will bring you back to step 4 above and where you can use the **FINE/PHOTO** button to select the desired switch. Choice (2) is to terminate the registration process by pressing the **STOP** button.

NOTE: Your entries, e.g., the RTI/TTI and user switch, etc. can be verified by printing out the SYSTEM CONFIGURATION LIST. We will explain how to do this in a later section.

TELEPHONE FEATURES

I. HOW TO USE THE FAX-150 AS A TELEPHONE

The **FAX-150** possesses very sophisticated telephone capabilities. Yet, these capabilities are easy to use.

Please note that the **FAX-150** can be used for voice conversation even when the unit is set to automatic facsimile reception mode or when the unit is copying a document.

I. Telephone Controls

All numbers are dialed from the numeric key pad on the control panel of the **FAX-150**. This pad is identical to the standard touch-tone telephone dial.

The four buttons to the left of the telephone key pad are used (from the top) as follows:

•	PAUSE	-	When pressed, a 3.7 second pause is generated. This button has other uses in telephone-related programming (see below).
•	REDIAL	_	Pressing this button makes the phone automatically redial the last number dialed. This button has additional uses (see below).
•	SPEED DIAL	_	Presssing this button initiates speed dial calls. This key is also used to program the speed dial numbers into the unit's memory.
•	НООК	<u>-</u>	Pressing this button allows you to initiate phone and fax calls while the handset is on-hook. The built-in speaker (under the handset) allows hands-off operation of the FAX-150 while dialing. This button has other uses (as we've discussed in facsimile-related programming). Please note, however, the FAX-150 is NOT a "speaker phone!"

The other telephone-related controls are located at the back of the unit:

•	PULSE/TONE	Selects rotary vs. tone mode of operation
•	RINGER VOLUME	Offers three settings - High, Medium, Low
•	SPEAKER VOLUME	This control provides continuous volume adjustment from HIGH (H) to LOW (L).

II. Using the handset

The handset of the **FAX-150** is used just like any other handset of a standard telephone. Please note the *volume adjustment switch* on the inside of the handset.

III. Standard dialing

There are two ways to dial a telephone call or a fax call:

- 1. OFF-HOOK Lift the handset, dial the number after hearing the dial tone.
- 2. ON HOOK Make sure that the unit's power is ON. Press the **HOOK** button and you can dial with the handset in its cradle after hearing the dial tone from the speaker. The speaker is located under the handset.

IV. Using the redial function

Redialing can be performed only immediately following a dialing (i.e., after you've dialed using OFF-HOOK, ON-HOOK or Speed Dialing). The redial memory accepts up to 31 digits in TONE mode or 32 digits in PULSE mode. If the number you've dialed has more than these numbers of digits, redial will not work.

If you wish to keep the number you are dialing confidential and do not wish anyone to call it after you leave the office or your desk unattended, simply press the redial buttom twice after completion of dialing. The redial function will not function.

V. Speed Dialing

The **FAX-150** allows you to program and use up to twenty (20) pre-recorded numbers of 16 digits (in pulse mode) or 15 digits (in the tone mode) each. If you need more digits, say for credit card calls or international calls, you can program and use more than one location for this longer number because the **FAX-150** allows "chain dialing" (i.e., pressing several speed-dial codes in sequence).

To program your most frequently-used telephone and fax numbers follow this procedure:

- 1. With the handset ON HOOK (in the cradle), press the SPEED DIAL button.
- Dial the desired telephone or fax number (up to 15 digits in TONE MODE, up to 16 digits in PULSE mode).
- 3. Press the SPEED DIAL button again.
- 4. Assign this number a two-digit code, starting with 00 and going up to 19 (this covers the entire 20 allowable numbers). Dial in this 2-digit code.
- 5. You can stop now or continue inputting the remainder of your frequently-used numbers by returning to Step 1.

To use the speed-dialing feature of this unit, follow this procedure:

- 1. Lift the handset or press the **HOOK** button.
- 2. Press the SPEED DIAL button after hearing the dial tone.
- 3. Dial the 2-digit code for the desired number.

To erase a programmed speed-dial number, follow this procedure:

- 1. Press the SPEED DIAL button twice.
- 2. Press the 2-digit code for the number you wish to erase from the memory.

VI. Using the PAUSE button

If communicating from a PBX extension, the **PAUSE** button should be used. Pressing **PAUSE** key between the numbers builds in 3.7 seconds delay needed to access the PBX's second dial tone. If a longer time is needed, such as in case of overseas calls, pressing the **PAUSE** button several times can stack a number of pauses (e.g., pressing it twice will give you 3.7 sec. x = 7.4 sec. delay).

Pressing the **PAUSE** button, the **REDIAL** button or flipping the **PULSE/TONE** switch during a redial operation or a speed-dialing operation releases the pause. Using the same controls once can also release a multiple stacked pause.

SYSTEM CONFIGURATION LIST

Earlier in this Manual we have shown you how to program certain facsimile, telephone and TAD-related fucntions. You can print out a report — the SYSTEM CONFIGURATION LIST that will summarize every parameter which you may have changed.

To print out the SYSTEM CONFIGURATION LIST follow this procedure:

- 1. Turn the power OFF.
- 2. Press and hold the START/COPY button and turn the power back ON.
- 3. The unit will print out the SYSTEM CONFIGURATION LIST.

The list for the FAX-150 is, for example:

**************************************	ST*********	**
*		*
* * * * * * * * * * * * * * * * * * *	3	*
* PARAMETER * 1. FAX PASSWORD	: 1204	*
* 2. RTI AND TTI	: 201 981 0300	*
* 3. STATION ID	: BROTHER U.S.A.	*
* 4. TAD SECURITY CODE	: 104	*
* 5. NUMBER OF ICM	: 4	*
* USER SWITCHES		*
* 1. TRANSMISSION SPEED	: 0: 4800 bps	*
* 2. AUDIBLE TONE	: 0: PRESENT	*
* 3,4. RESOLUTION MODE	: 00: NORMAL	*
* 5. NOT USED	: 0: PRESENT	*
* 6. END OF PAGE MARK * 7. NOT USED	: U. PRESENT	*
*		*
******BROTHER FAX-150*********	********	***

CARING FOR YOUR FAX-150

Optimum print quality can be maintained if the scanning and printing area are cleaned after using three or four rolls of recording paper. The procedure is explained below:

I. CLEANING THE PRINTING AREA

- Remove the recording paper roll from the unit.
- Using an applicator or a soft cloth soaked in alcohol, gently remove any dirt from the printing head. Do not use organic solvents, such as benzene or thinner.
- Use a dry cloth to gently wipe off any dirt from the rubber roller and the recording paper holder.

II. CLEANING THE SCANNING AREA

 Using an applicator or a soft cloth soaked in alcohol, gently remove any dirt from the scanner and the document pressure bar. Do not use organic solvents, such as benzene or thinner.

III. CLEANING THE BODY OF THE UNIT

- Use a dry cloth to gently wipe off any dirt from the body of the unit. Remove visible dirt and dust.
- Do not use water, alcohol, thinner or any other organic solvent.

TROUBLESHOOTING

If you are having trouble with the image quality in TRANSMIT or RECEIVE modes, try the unit in the COPY mode. If this test gives you a good reproduction, the problem is not with your unit but with the other unit or the telephone lines. If this GUIDE does not help you in solving a problem with your unit, please call our service at: 1-800-284-4FAX.

I. **TRANSMITTING**

SYMPTOM	POSSIBLE CAUSE	ACTION
No lamp indications on cover. Power switch is turned on but power lamp does not light.	Is the power cord plugged in?	Plug in power cord.
Faint drawings or characters are not reproduced when sending or copying.	Contrast switch set wrong.	Change Contrast switch on the front of the unit to "L" (Light setting).
Document jam	Document jammed in transmitting section.	 Turn the power off. Pull up on the control panel to open it up. Remove the jammed document. Close cover making sure that you hear it click into place. Do not retransmit this document but make a copy of it first.
Error indicator is lit	Communications error has occurred – this is usually caused by a bad phone line.	1. Redial and try transmission again. 2. If you get failure again, call the distant location and verify if their unit is functioning and that it is a Group 3 fax terminal. If it is not working, have them call their service. If it is not a Group 3, then you cannot transmit to them at all.

RECEIVING

SYMPTOM	POSSIBLE CAUSE	ACTION
Received copies are blank	The paper roll is in backwards. Wrong type of paper.	Reload the paper roll correctly. Replace with proper thermal recording paper.
The telephone rings continuously	Auto answer is turned off. No power. No recording paper roll	1. Turn auto answer switch ON. It is located on the front of the unit. 2. Check outlet voltage. 3. Load the new paper roll.
Recording paper is jammed	Paper is jammed in receiving section.	 Turn the power off. Press the recording paper cover button to open the cover. Remove the paper roll and tear off the jammed paper. Reload the paper roll. Close the cover making sure you hear it click into place. Tear off excess paper.
Error indicator is lit	Communications error has occurred – this us usually caused by a bad phone line.	 Ask the transmitting unit to resend the document. Make sure the other unit is a Group 3 compatible machine. Make sure your unit is properly connected to the phone line. Make sure the other unit is working properly.

SPEED-DIAL DIRECTORY

Speed- dial No.	Telephone Number	Name
00		
01		
02		
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		

SPECIFICATIONS

Type: Desktop facsimile transceiver

Compatibility: **CCITT Group 3**

Coding method: Modified Huffman (MH)

Modulation: CCITT V.27 ter (4800/2400 bps), CCITT V.21

Transmission time: 45 seconds (8.5"x11")

Document input size: 8.5" Recording paper size: 8.5"x98' Recording paper type: Thermal roll Effective scanning width: 8.2"

8.2" Effective recording width:

Scanner type: Optical fiber Recorder type: Line, thermal

Resolution: Standard Mode - 203x98 lines/inch;

Fine Mode - 203x196 lines/inch Document feeder:

1 page Gray scale: 16 shades Telephone function: Built-in handset Dialing method: Selectable tone/pulse

Station memory: 20 numbers Speaker type: Monitor

Power source: 110-120 VAC, 60Hz

Communications source: Public Switched Telephone Network Connection requirements: USOC RJ11C modular jack or equivalent Standby – under 12 W; Peak – under 150 W 41 to 95 degrees (F) Power consumption:

Operating environment:

Dimensions: 13.0"(W) x 9.4"(D) x 4.7"(H)

Weight: 10.6 lb

Specifications are subject to change without notice